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Groundwater Quality Protection Program

TAYLORVILLE
FACILITY NUMBER 0210600
WELL SITE SURVEY
REPORT

Division of Public Water Supplies

[redacted]

IEPA/PWS/90-198

GROUNDWATER QUALITY PROTECTION PROGRAM:

TAYLORVILLE
FACILITY NUMBER 0210600
WELL SITE SURVEY
REPORT

Prepared by:

Division of Public Water Supplies

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TABLE OF CONTENTS

I. Introduction

II. Facility Description and Geologic Profile of Well Sites

III. Groundwater Sampling and Monitoring History

IV. Well Site Survey Methods and Procedures

V. Summary

VI. Technical Appendices

A. Topographic Map

B. Aerial Photographic Map

1. Taylorville Well #10 (IEPA #52085) Summary Description and Unit Inventory

C. Aerial Photographic Map

1. Taylorville Well #11 (IEPA #52086) Summary Description and Unit Inventory

2. Taylorville Well #12 (IEPA #52087) Summary Description and Unit Inventory

3. Taylorville Well #13 (IEPA #52088) Summary Description and Unit Inventory

D. Facility Wells Report

E. Detailed Sampling/Monitoring Results

F. Chemical Information Sheet(s)

G. Glossary-Chemical Information Sheet(s)

INTRODUCTION

This report has been prepared by the Agency pursuant to Section 17.1 of the Illinois Environmental Protection Act. The report summarizes information about your facility and samples collected and analyzed from your well(s). The well site survey provides an inventory of the area around the well(s) to help increase your awareness of potential hazards to groundwater utilized by your facility. This information and technical data will assist you in developing and implementing local groundwater protection measures authorized by the Act.

FACILITY DESCRIPTION AND GEOLOGIC PROFILE OF WELL SITES

The City of Taylorville obtains its water from Lake Taylorville and four drift wells. An average of 2,563,000 gallons per day is provided to 5,477 services of which approximately one third is supplied by the wells. Wells #11, #12 and #13 are the primary supply wells. Well #10 is currently being used to monitor water wells but may be rehabilitated for future use. See Table I for a description of each well. The surficial geologic susceptibility rating is A2. The aquifer is overlain by sand and gravel sediments with moderate to high permeability. Permeability is a measure of the ability of a soil or sediment to transmit fluids. A complete description and geologic profile is found in the Facility Wells Report (Appendix D).

Table I

	Minimum Setback (ft.)	Maximum Setback (ft.)	Status	Capacity (gpm) (MGD)	Specific Capacity (gpm/ft.)	Treatment	Aquifer	Well Depth (ft.)	Well Logs Available
Well #10 (52085)	400	No	I			Chl., Fl., Sftng Perm., CO2, Clar., Carbon	Sand and Gravel	118	
Well #11 (52086)	400	No	A	600 0.864	540.0	Same	Same	90	
Well #12 (52087)	400	No	A	350 0.504	500.0	Same	Same	88	
Well #13 (52088)	400	No	A	700 1.008	1400.0	Same	Same	96	

A - Active
I - Inactive

GROUNDWATER SAMPLING AND MONITORING HISTORY

Taylorville Wells #11, #12 and #13 were sampled on September 9, 1986 as part of a Statewide Groundwater Monitoring Program. The samples were analyzed for inorganic chemicals (IOC) and volatile organic/aromatic compounds (VOC/VOA). IOC analyses indicate that parameters are consistent with other sand and gravel aquifers in Illinois. Initial VOC/VOA analyses detected 2 parts per billion (ppb) of 1,1,1-trichloroethane (1,1,1-TCA) in Well #13. Subsequent quarterly sampling failed to confirm this. Information on 1,1,1-TCA can be found in Appendix F, complete monitoring results are in Appendix E.

WELL SITE SURVEY METHODS AND PROCEDURES

The detailed well site survey consists of an aerial photographic map and inventory that relate infomration about potential contamination sources, routes and possible problem sites to public water supply well(s). The location of the potential sources, route, possible problem sites, minimum setback zone and 1,000 ft. survey area are all displayed on the aerial photographic map (Appendix B).

The first page of each survey consists of a summary description and geologic profile for each well. The second and following pages of the survey inventory units within and bordering a 1,000 foot radius of the wellhead. A unit is defined as any device, mechanism, equipment, or area (exclusive of land utilized only for agricultural production). The Agency 5-digit well number is associated with a unit or map code, and then classified. The classification codes relate to definitions of potential contamination sources and routes as defined in the Illinois Groundwater Protection Act (see Groundwater Primer pages 18-19). The distance and direction of the unit from the wellhead is also indicated.

Survey Results and Findings

The Taylorville well site survey was conducted on September 27, 1989 by Wade Boring from the Agency's Springfield office. The following describes the results and findings for the Taylorville public water wells.

Taylorville Wells #10, #11, #12 and #13 (IEPA #52085, 52086, 52087 and 52088)

The survey area is rural. The area is planted in row crops. There were no visible sources of contamination observed within 1,500 feet of Wells #10, #11, #12 or #13.

SUMMARY

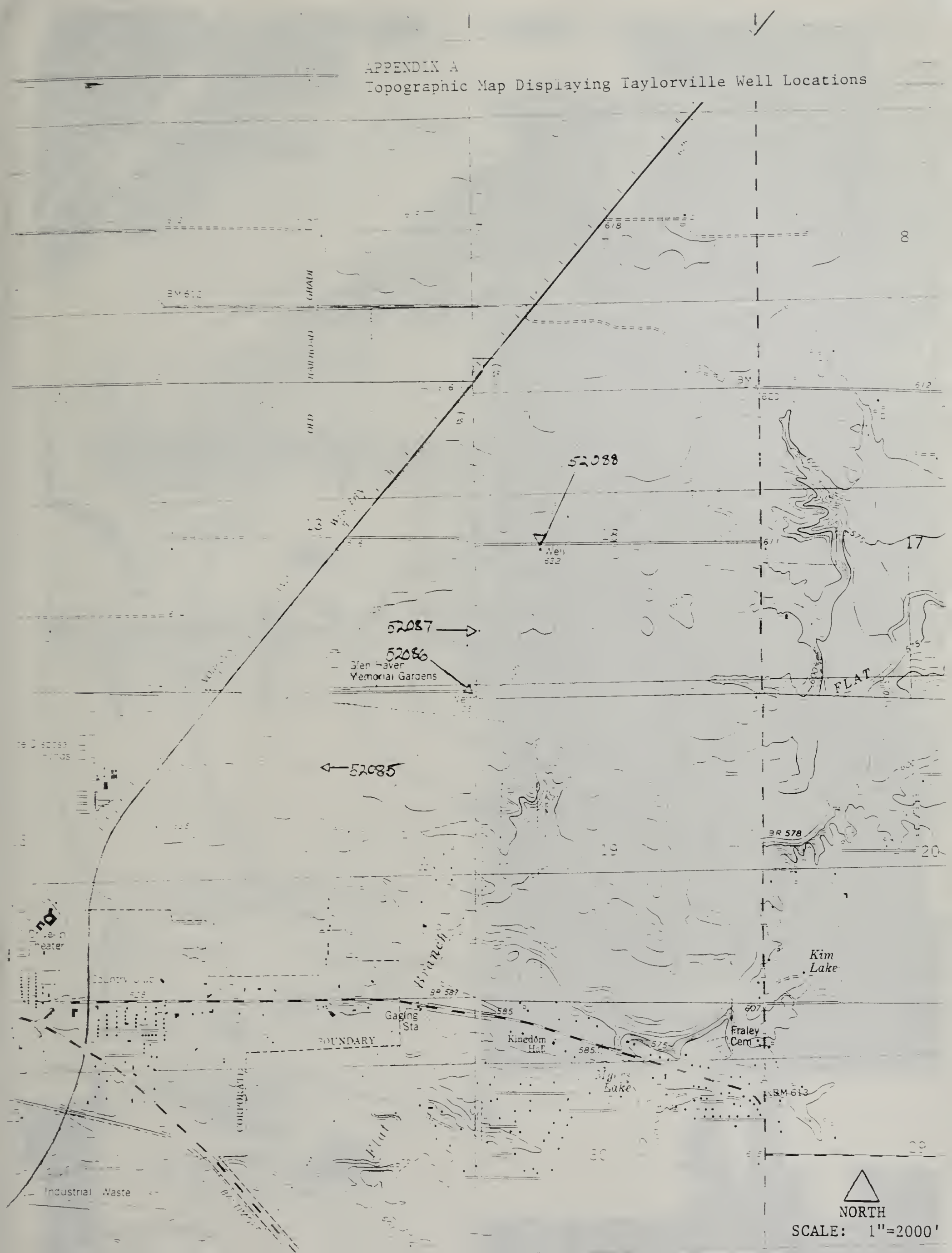
The well site survey conducted indicates that there are no potential sources/sites that could pose a hazard to groundwater utilized by the Taylorville public water wells.

The Illinois Environmental Protection Act provides minimum protection zones for your wells. These minimum protection zones are regulated by the IEPA. The Act also authorizes county and municipal officials the opportunity to provide maximum protection zones up to 1,000 feet. The responsibility for the controls would then be assumed by local officials through adoption of a maximum setback zone ordinance.

TECHNICAL APPENDICES

APPENDIX A

Topographic Map Displaying Taylorville Well Locations



APPENDIX B
Aerial Photographic Map

INITIAL
7/27/90

CEMETARY

52085

200'

400'

1000'

1500'

1500' for Weld

NORTH
SCALE: 1" = 400'
TAYLORVILLE
0210600

APPENDIX: B1 WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE Taylorville Well #10 (IEPA #52085)

SURVEYOR: Wade Boring
SURVEY DATE: September 27, 1989

ADDRESS:
Taylorville City Water Department
2222 Lincoln Trail
Taylorville, Illinois 62568

AGENCY WELL NO: 52085
WELL NAME & DESC.: Well 10
TREATMENT APPLICATION POINT: 01
FACILITY NO. & NAME: 0210600 - Taylorville
FAC. PHONE NUMBER: 217/287-1441
LOCATION: TWP, RNG, SECTION, 10 ACRE PLOT: 13N, 2W, 24, 5G
DISTANCE FROM CORNER: 1275S, 2780W
QUAD SHEET CODE & NAME: 174D-Taylorville
MIN. SETBACK: 400 Ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2-Moderate to high permeability sand and gravel sediments
AGE OF WELL (DATE WELL CONSTRUCTION): 1950
WELL DEPTH: 118 ft.
AQUIFER CODE: 0101 - Sand and gravel aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The Survey area is rural. The area is planted in row crops.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:

WB:lab/sp/2699n, 1-5

APPENDIX: B1 INVENTORY AND SYNOPSIS OF UNITS Taylorville Well #10 (IEPA #52085)

Classification (CLASSF*) KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

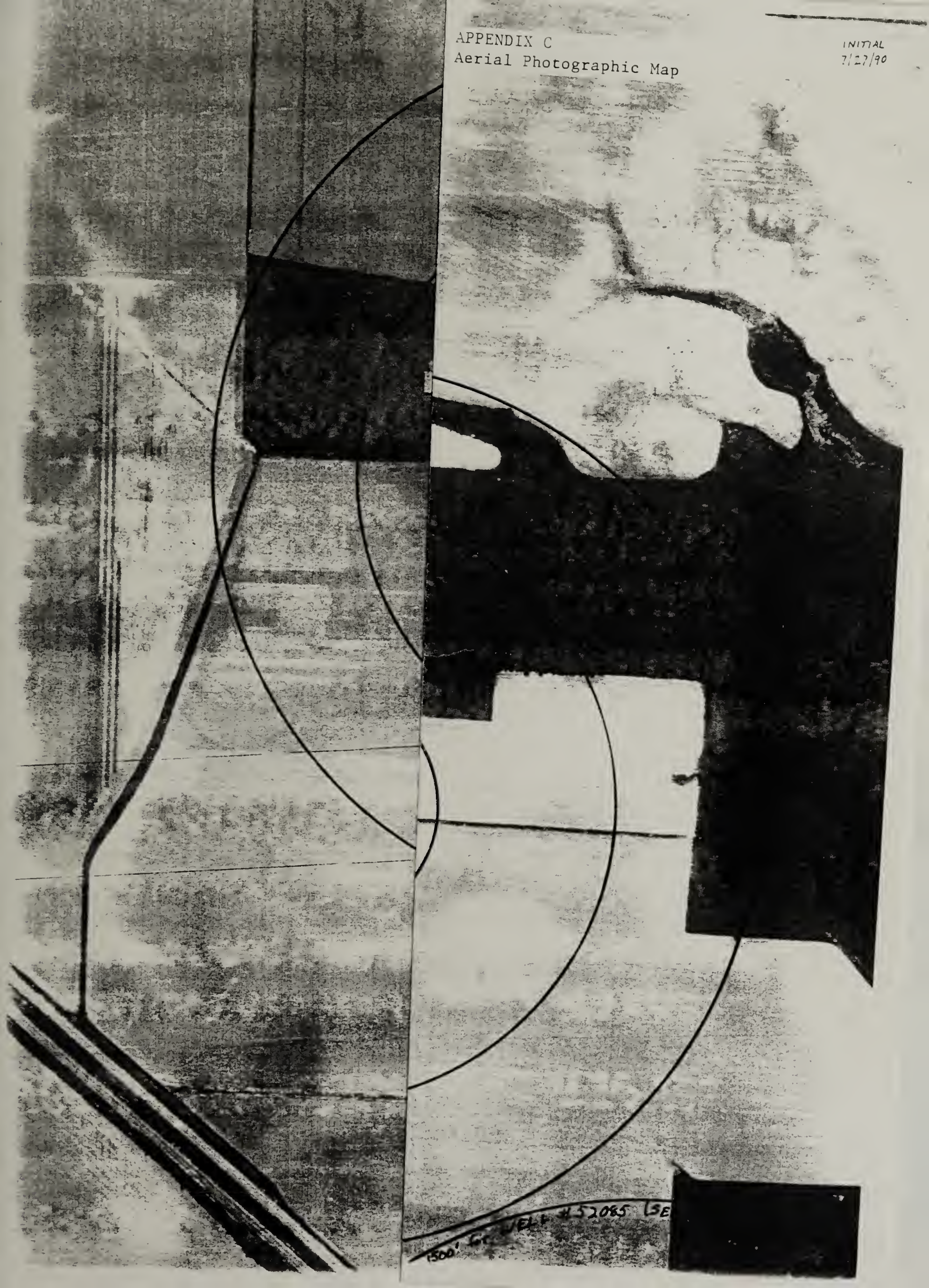
WELL NO. - MAP CODE - CLASSF*: 52085
NAME & ADDRESS OF UNIT OWNER: No visible sources of contamination
DESCRIPTION AND COMMENTS:
PRE OR POST (Y,N):
DISTANCE AND DIRECTION:

WB:lab/sp/2699n, 6

APPENDIX C

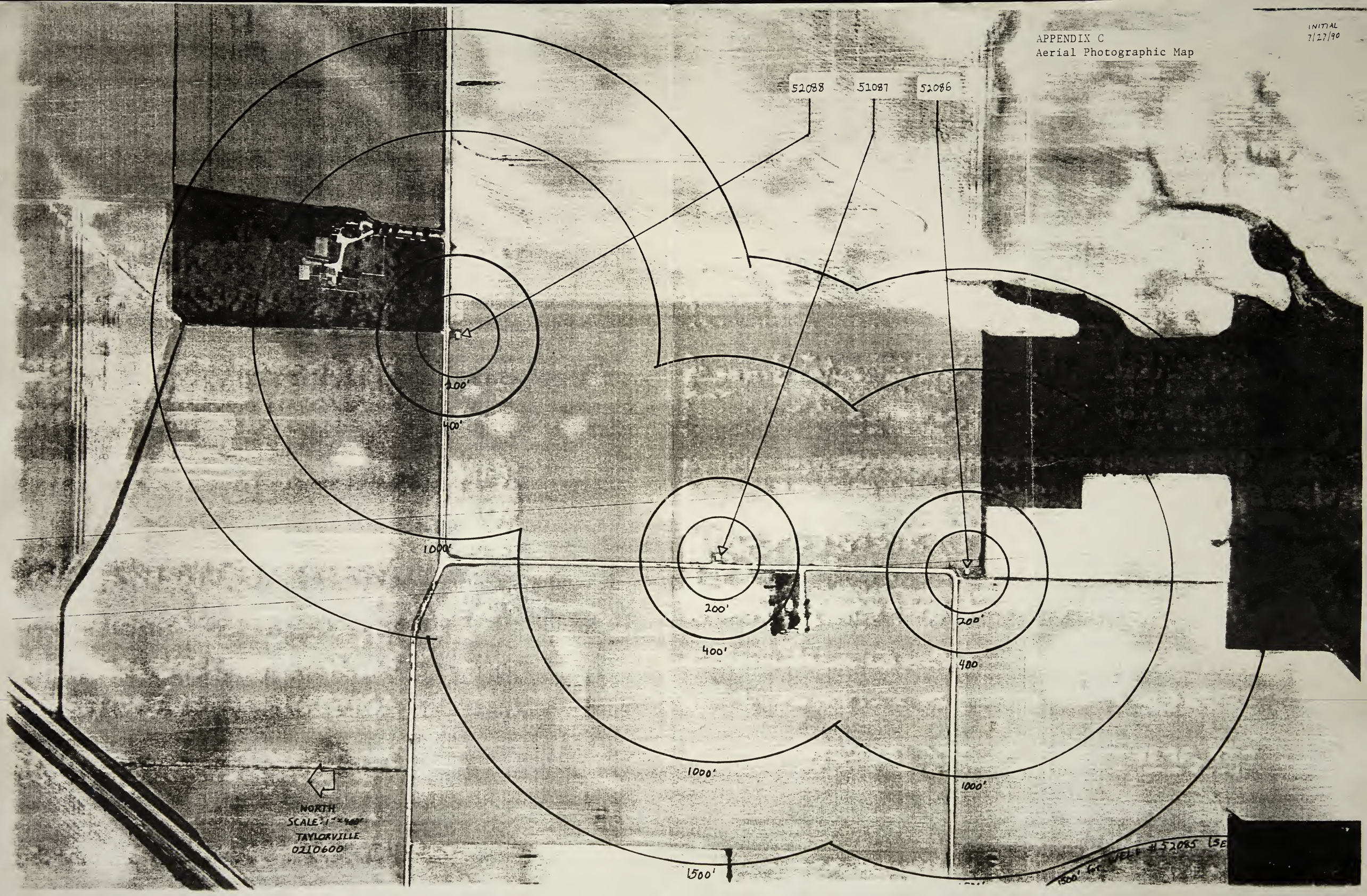
APPENDIX C
Aerial Photographic Map

INITIAL
7/27/90



APPENDIX C
Aerial Photographic Map

INITIAL
7/27/90



APPENDIX: C1 WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE
Taylorville Well #11 (IEPA #52086)

SURVEYOR: Wade Boring
SURVEY DATE: September 27, 1989

ADDRESS:
Taylorville City Water Department
2222 Lincoln Trail
Taylorville, Illinois 62568

AGENCY WELL NO: 52086
WELL NAME & DESC.: Well 11
TREATMENT APPLICATION POINT: 01
FACILITY NO. & NAME: 0210600 - Taylorville
FAC. PHONE NUMBER: 217/287-1441
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
13N, 2W, 24, 1H
DISTANCE FROM CORNER: 50S, 20W
QUAD SHEET CODE & NAME: 174D-Taylorville
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2-moderate to high permeability sand and gravel sediments
AGE OF WELL (DATE WELL CONSTRUCTION): 1950
WELL DEPTH: 90 ft.
AQUIFER CODE: 0909 - Sand and gravel aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is rural. The area is planted in row crops.

WB:lab/sp/2699n, 7

APPENDIX: C1 INVENTORY AND SYNOPSIS OF UNITS Taylorville Well #11 (IEPA #52086)

Classification (CLASSF*) KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 52086
NAME & ADDRESS OF UNIT OWNER: No visible sources of contamination.
DESCRIPTION AND COMMENTS:
PRE OR POST (Y,N):
DISTANCE AND DIRECTION:

WB:lab/sp/2699n. 8

APPENDIX: C2 WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE
Taylorville Well #12 (IEPA #52087)

SURVEYOR: Wade Boring
SURVEY DATE: September 27, 1989

ADDRESS:
Taylorville City Water Department
2222 Lincoln Trail
Taylorville, Illinois 62568

AGENCY WELL NO: 52087
WELL NAME & DESC.: Well 12
TREATMENT APPLICATION POINT: 01
FACILITY NO. & NAME: 0210600 - Taylorville
FAC. PHONE NUMBER: 217/287-1441
LOCATION:
TWP. RNG. SECTION. 10 ACRE PLOT:
13N. 1W. 18. 8B
DISTANCE FROM CORNER: 1150N. 50E
QUAD SHEET CODE & NAME: 174D Taylorville
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2 - moderate to high permeability sand and gravel sedimets
AGE OF WELL (DATE WELL CONSTRUCTION): 1950
WELL DEPTH: 88 ft.
AQUIFER CODE: 0909 - Sand and gravel aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is rural. The area is planted in row crops.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:

WB:lab/sp/2699n. 9

APPENDIX: C2 INVENTORY AND SYNOPSIS OF UNITS Taylorville Well #12 (IEPA #52087)

Classification (CLASSF*) KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: S2087
NAME & ADDRESS OF UNIT OWNER: No visible sources of contamination.
DESCRIPTION AND COMMENTS:
PRE OR POST (Y,N):
DISTANCE AND DIRECTION:

APPENDIX: C3 WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE
Taylorville Well #13 (IEPA #52088)

SURVEYOR: Wade Boring
SURVEY DATE: September 27, 1989

ADDRESS:
Taylorville City Water Department
2222 Lincoln Trail
Taylorville, Illinois 62568

AGENCY WELL NO: 52088
WELL NAME & DESC.: Well 13
TREATMENT APPLICATION POINT: 01
FACILITY NO. & NAME: 0210600 - Taylorville
FAC. PHONE NUMBER: 217/287-1441
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
13N, 1W, 18, 6D
DISTANCE FROM CORNER: 2560N, 3800W
QUAD SHEET CODE & NAME: 175C - Hilleys
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2-moderate to high permeability sand and gravel sediments
AGE OF WELL (DATE WELL CONSTRUCTION): 1950
WELL DEPTH: 96 ft.
AQUIFER CODE: 0909-sand and gravel aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is rural. The area is planted in row crops.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:

WB:lab/sp/2699n, 11

APPENDIX: C] INVENTORY AND SYNOPSIS OF UNITS Taylorville Well #13 (IEPA #52088)

Classification (CLASSF*) KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 52088
NAME & ADDRESS OF UNIT OWNER:
DESCRIPTION AND COMMENTS: No visible sources of contamination
PRE OR POST (Y,N):
DISTANCE AND DIRECTION:

WB:lab/sp/2699n, 12

APPENDIX D

FACILITY: 0210600 TAYLORVILLE

OWNER	OFFICIAL CUSTODIAN
JIM DOREN	JOE A. MARUCCO
2222 LINCOLN TRAIL	TAYLORVILLE CITY WATER DEPT.
TAYLORVILLE IL 62568	2222 LINCOLN TRAIL
	TAYLORVILLE IL 62568

WELL: 52084 WELL 5 280' SW POPLAR/CHEROKEESTREETS STATUS: ABANDONED DEPTH(FT): 119
LATITUDE: N39 33 02.0 LONGITUDE: W089 17 27.0 TWP: RNG: SEC: PLOT:
SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): NONE ---

WELL: 52085 WELL 10 0.5 MI E 0.75 MI N OF WTP STATUS: INACTIVE* DEPTH(FT): 118
LATITUDE: N39 35 50.0 LONGITUDE: W089 15 37.0 TWP: 13N RNG: 02W SEC: 24 PLOT: 5G
SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 400* ---

WELL: 52086 WELL 1? 0.5MI E 1MI N 0.5MI E OF WTP STATUS: ACTIVE DEPTH(FT): 90
LATITUDE: N39 34 02.0 LONGITUDE: W089 15 01.5 TWP: 13N RNG: 02W SEC: 24 PLOT: 1H
SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

WELL: 52087 WELL 1? 1120 FT N WELL 11 STATUS: ACTIVE DEPTH(FT): 88
LATITUDE: N39 34 13.0 LONGITUDE: W089 15 01.0 TWP: 13N RNG: 01W SEC: 18 PLOT: 8B
SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

WELL: 52088 WELL 1? 1440 FT N 1040 FT E OF WELL 12 STATUS: ACTIVE DEPTH(FT): 96
LATITUDE: N39 34 27.0 LONGITUDE: W089 14 47.0 TWP: 13N RNG: 01W SEC: 18 PLOT: 6D
SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

SUSCEPTIBILITY CODE:
LAND BURIAL: 2 = THICK, PERMEABLE SAND AND GRAVEL WITHIN 20 FT OF LAND SURFACE.

*NOTE: INACTIVE WELLS SHOULD EITHER BE RETROFITTED FOR USE OR PROPERLY ABANDONED. INACTIVE WELLS WHICH ARE IMPROPERLY ABANDONED ARE CONSIDERED POTENTIAL ROUTES ACCORDING TO P.A. 85-0863.

APPENDIX E

FACILITY: [illegible] TAYLORVILL. STATUS: A PUBLIC: Y COMM: Y TYPE WATER: M
TAP: STATUS:
RAW SRCE: STATUS:

SAMPLE NO: 370173 LOCATION: 6FT COLL DATE: 02/03/87 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: BRUCE MCKINNEY LAB RCVD: 04/08/87 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: C-CHEMICAL OBSERVTNS: SMPL PERIOD: 02/87 FUND CODE:

ANALYSTS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		580.000				
		00403	PH LABORATORY UNITS		9.100				
		00410	ALKALINITY,TOTAL MG/L AS CACO3		189.000				
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100	<			
		00620	NITRATE + NITRITE TOTAL MG/L AS N		4.800		10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005	<	0.200		
		00900	HARDNESS,TOTA MG/L AS CACO3		273.000				
		00915	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		69.500				
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		25.000				
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		17.500				
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.100				
		00940	CHLORIDE,TOTAL MG/L AS CL		20.000				
		00945	SULFATE,TOTAL MG/L AS SO4		73.000				
		00951	FLUORIDE,TOTAL MG/L AS F		0.170		4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		13.000				
		01002	ARSENIC,TOTAL RECOVERABLE UG/L AS AS		1.000	<	50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		40.000		1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500	<			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		104.000				
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP		3.000	<	10.000		
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICP		5.000	<	50.000		
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000	<			
		01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		5.000	<	5000.000		
		01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		95.000		1000.000		
		01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000	<	50.000		
		01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		106.000		150.000		
		01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000	<			
		01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000	<	50.000		
		01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		96.000				
		01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		5.000	<			
		01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		50.000	<	5000.000		
		01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP		68.000				
		01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		1.000		10.000		
		70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L		343.000				
		71900	MERCURY,TOTAL UG/L AS HG		0.050	<	2.000		

FACILITY: 0210600 TAYLORVILLE STATUS: A PUBLIC: Y COMM: Y TYPE WATER: M
TAP: 01 WATER PLANT STATUS: A
RAW SRCE: 52076 WELL 11 0.5MI E 1MI N 0.5MI E OF WTP STATUS: A

SAMPLE NO: 7000585 LOCATION: WELL COLL DATE: 09/09/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 8-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 09/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100	<			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		4.400		10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010	<			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010	<	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		99.000				
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		38.000				
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		14.000				
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		0.880				
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		13.000				
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		108.000				
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.100	<	4.000		
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2		20.000				
0000001	013	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000	<	50.000		
0000001	014	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		32.000		1000.000		
0000001	015	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		5.000				
0000001	016	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		50.000	<			
0000001	017	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP		3.000	<	10.000		
0000001	018	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICP		5.000	<	50.000		
0000001	019	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000	<			
0000001	020	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		12.000		5000.000		
0000001	021	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		97.000		1000.000		
0000001	022	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000	<	50.000		
0000001	023	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		115.000		150.000		
0000001	024	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000	<			
0000001	025	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000	<	50.000		
0000001	026	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		117.000				
0000001	027	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		5.000	<			
0000001	028	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		100.000	<	5000.000		
0000001	029	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP		50.000	<			
0000001	030	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		2.000		10.000		
0000001	031	32730	PHENOLS, TOTAL RECOVERABLE UG/L		5.000				
0000001	032	70300	RESIDUE,TOTAL FILTERABLE 180 C,MG/L		488.000				
0000001	033	71900	MERCURY,TOTAL UG/L AS HG		0.050	<	2.000		
0000001	034	00010	WATER TEMPERATURE DEG C		13.500				
0000001	035	00059	FLOW (PUMPING) RATE GAL/MIN		750.000				
0000001	036	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		5.000				
0000001	037	00095	CONDUCTIVITY(EC)-LBORUMHOS/CM @ 25 C		665.000				
0000001	038	00403	PH PH UNITS		7.000				
0000001	039	00410	ALKALINITY,TOTAL MG/L AS CACO3		279.000				
0000001	040	72014	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		480.000				

FACILITY: 0210600 TAYLORVILLE *** CONTINUED ***

0000001 041 90410 279.000

SAMPLE NO: Z000684 LOCATION: WELL COLL DATE: 09/09/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 09/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	002	32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
0000001	004	32104	BROMOFORM UG/L GC/MS		1.000 <			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000 <			
0000001	007	34010	TOLUENE UG/L		1.000 <			
0000001	008	34030	BENZENE UG/L		1.000 <	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <			
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000 <			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
0000001	014	34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000 <	7.000		
0000001	015	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		1.000 <	200.000		
0000001	016	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	017	39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000		
0000001	018	00010	WATER TEMPERATURE DEG C		13.500			
0000001	019	00059	FLOW (PUMPING) RATE GAL/MIN		750.000			
0000001	020	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		5.000			
0000001	021	00095	CONDUCTIVITY(EC)-LABCUMHOS/CM @ 25 C		665.000			
0000001	022	00400	PH PH UNITS		7.000			
0000001	023	00410	ALKALINITY,TOTAL MG/L AS CACO3		279.000			
0000001	024	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		480.000			
0000001	025	90410			279.000			

FACILITY: 0210600 TAYLORVILLE STATUS: A PUBLIC: Y COMM: Y TYPE WATER: M
TAP: 01 WATER PLANT STATUS: A
RAW SRCE: 52087 WELL 12 1120 FT N WELL 11 STATUS: A

SAMPLE NO: Z000607 LOCATION: WELL COLL DATE: 09/09/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 09/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100	<			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		3.500		10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010	<			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010	<	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		94.000				
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		32.000				
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		16.000				
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		0.980				
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		15.000				
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		115.000				
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.120		4.000		
0000001	012	00955	SILICA,TOTAL MG/L AS SIO2		18.000				
0000001	013	01002	ARSENIC,TOTAL RECOVERABLE UG/L AS AS		1.000	<	50.000		
0000001	014	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		36.000		1000.000		
0000001	015	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		5.000				
0000001	016	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		50.000	<			
0000001	017	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP		3.000	<	10.000		
0000001	018	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICP		5.000	<	50.000		
0000001	019	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000	<			
0000001	020	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		16.000		5000.000		
0000001	021	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		254.000		1000.000		
0000001	022	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000	<	50.000		
0000001	023	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		123.000		150.000		
0000001	024	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000	<			
0000001	025	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000	<	50.000		
0000001	026	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		112.000				
0000001	027	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		5.000	<			
0000001	028	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		100.000	<	5000.000		
0000001	029	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP		50.000	<			
0000001	030	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		2.000		10.000		
0000001	031	32730	PHENOLS, TOTAL RECOVERABLE UG/L		5.000	<			
0000001	032	70300	RESIDUE,TOTAL FILTERABLE 0180 C,MG/L		445.000				
0000001	033	71900	MERCURY,TOTAL UG/L AS HG		0.070		2.000		
0000001	034	00010	WATER TEMPERATURE DEG C		13.500				
0000001	035	00059	FLOW (PUMPING) RATE GAL/MIN		725.000				
0000001	036	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		4.000				
0000001	037	00095	CONDUCTIVITY(EC)-LABCUMHOS/CM @ 25 C		655.000				
0000001	038	00400	PH PH UNITS		7.100				
0000001	039	00410	ALKALINITY,TOTAL MG/L AS CACO3		250.000				
0000001	040	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		70.000				

FACILITY: [illegible] TAYLORVILLE *** CONTINUED ***

0000001 C41 90410 250.000

SAMPLE NO: 2000686 LOCATION: WELL COLL DATE: 09/09/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSERVATNS: SMPL PERIOD: 09/86 FUND CODE:

ANALYSIS ID	PSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000	<			
0000001	002	32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000	<	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000	<	5.000		
0000001	004	32104	BROMOFORM UG/L GC/MS		1.000	<			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000	<			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000	<			
0000001	007	34010	TOLUENE UG/L		1.000	<			
0000001	008	34030	BENZENE UG/L		1.000	<	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000	<			
0000001	010	34371	ETHYLBENZENE UG/L		1.000	<			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000	<			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000	<			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000	<			
0000001	014	34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000	<	7.000		
0000001	015	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		1.000	<	200.000		
0000001	016	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000	<			
0000001	017	39180	TRICHLOROETHYLENE UG/L		1.000	<	5.000		
0000001	018	00010	WATER TEMPERATURE DEG C		13.500				
0000001	019	00053	FLOW (PUMPING) RATE GAL/MIN		725.000				
0000001	020	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		4.000				
0000001	021	00095	CONDUCTIVITY(EC)-LABCUMHOS/CM @ 25 C		655.000				
0000001	022	00400	PH PH UNITS		7.100				
0000001	024	00410	ALKALINITY,TOTAL MG/L AS CACO3		250.000				
0000001	024	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		70.000				
0000001	025	90410			250.000				

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES
SELECTED SAMPLE EXPANDED REPORT

FACILITY: [illegible] TAYLORVILLE STATUS: A PUBLIC: Y COMM: Y TYPE WATER: M
TAP: 01 WATER PLANT STATUS: A
RAW SRCE: [illegible] WELL 12 1440 FT N 1940 FT E OF WELL 12 STATUS: A

SAMPLE NO: Z000[illegible] LOCATION: WELL COLL DATE: 09/09/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: Y-GWM INORG OBSERVATNS: SMPL PERIOD: 09/86 FUND CODE:

ANALYSIS ID	PSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		8.200	10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010 <			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010 <	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		60.000			
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS,CA ANAL BY ICP		22.000			
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		10.000			
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		0.440			
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		12.000			
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		42.000			
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.140	4.000		
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2		18.000			
0000001	013	01002	ARSENIC,TOTAL RECOVERABLE UG/L AS AS		1.000 <	50.000		
0000001	014	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		11.000	1000.000		
0000001	015	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		3.000			
0000001	016	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		50.000 <			
0000001	017	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP		3.000 <	10.000		
0000001	018	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICP		5.000 <	50.000		
0000001	019	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <			
0000001	020	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		49.000	5000.000		
0000001	021	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		50.000 <	1000.000		
0000001	022	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000 <	50.000		
0000001	023	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		11.000	150.000		
0000001	024	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000 <			
0000001	025	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000 <	50.000		
0000001	026	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		69.000			
0000001	027	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		5.000 <			
0000001	028	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		100.000 <	5000.000		
0000001	029	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP		50.000 <			
0000001	030	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		1.000	10.000		
0000001	031	32730	PHENOLS, TOTAL RECOVERABLE UG/L		5.000 <			
0000001	032	70300	RESIDUE,TOTAL FILTERABLE 0180 C,MG/L		282.000			
0000001	033	71900	MERCURY,TOTAL UG/L AS HG		0.050 <	2.000		
0000001	034	00010	WATER TEMPERATURE DEG C		13.500			
0000001	035	00053	FLOW (PUMPING) RATE GAL/MIN		750.000			
0000001	036	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		84.000			
0000001	037	00095	CONDUCTIVITY(EC)-LABCUMHOS/CM @ 25 C		470.000			
0000001	038	00400	PH PH UNITS		7.400			
0000001	039	00410	ALKALINITY,TOTAL MG/L AS CACO3		166.000			
0000001	040	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		515.000			

FACILITY: 0210600 TAYLORVILLE *** CONTINUED ***

0000001 041 9641. 166.000

SAMPLE NO: 0970009403 LOCATION: TAYLORVILLE/WELL 13 COLL DATE: 01/09/89 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: DAVID SPEAGLE LAB RCVD: 01/10/89 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOCS LAB COMPL: 01/24/89 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 01/89 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	5.000		
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000		
431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000		
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000		
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000 <			
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <			
431WV00	019	81551	XYLENE UG/L	UG/L	1.000 <			

SAMPLE NO: 0960785. LOCATION: WELL 3 COLL DATE: 10/04/88 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: JOE MARUCCO LAB RCVD: 10/05/88 RECEIVED BY:
SMPL PURP: 9-VARIANCE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 10/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
		32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
		32104	BROMOFORM UG/L GC/MS		1.000 <			
		32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
		32106	CHLOROFORM UG/L GC/MS		1.000 <			
		34301	CHLOROBENZENE UG/L		1.000 <			
		34423	METHYLENE CHLORIDE UG/L		1.000 <			
		34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
		34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
		34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000 <	7.000		
		34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		1.000 <	200.000		
		34531	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		

FACILITY: 0210600 TAYLORVILLE *** MIXED ***

	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000	<	
		DICHLOROSTYRENE UG/L		1.000	<	
		TRICHLOROETHYLENE UG/L		1.000	<	5.000
	78113	ETHYLBENZENE UG/L		1.000	<	
	78124	BENZENE UG/L		1.000	<	5.000
	78131	TOLUENE UG/L		1.000	<	
	81551	XYLENE UG/L		1.000	<	

SAMPLE NO: D86678100 LOCATION: TAYLORVILLE/4 FT FROM WELL
SMPL TYPE: RAW COLLECTOR: BRUCE MCKINNEY
SMPL PURP: 9-VARIANCE COMMENTS: VOCS
SMPL PROG: V-VOC OBSRVATNS: VOCS

COLL DATE: 08/09/88 DELIVERED BY: MAIL
LAB RCVD: 08/10/88 RECEIVED BY: D V
LAB COMPL: 08/30/88 LAB SUPERVISOR: JTH
SMPL PERIOD: 08/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		DRINK WTR STANDARDS	RAW WTR STANDARDS	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000	<			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000	<			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000	<			
431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000	<			
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000	<			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	7.000		
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000	<			
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<			
431WV00	009		1,2-DICHLOROETHANE UG/L	UG/L	1.000	<	5.000		
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000	<	200.000		
431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000	<	5.000		
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000	<	5.000		
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<			
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000	<			
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000	<			
431WV00	016	78124	BENZENE UG/L	UG/L	1.000	<	5.000		
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000	<			
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000	<			
431WV00	019	81551	XYLENE UG/L	UG/L	1.000	<			

SAMPLE NO: D86415300 LOCATION: TAYLORVILLE/WELL 4
SMPL TYPE: RAW COLLECTOR: B MCKINNEY
SMPL PURP: 9-VARIANCE COMMENTS: VOCS
SMPL PROG: V-VOC OBSRVATNS: 2 VOC

COLL DATE: 04/19/88 DELIVERED BY: MAIL
LAB RCVD: 04/20/88 RECEIVED BY: D V
LAB COMPL: 05/19/88 LAB SUPERVISOR: JTH
SMPL PERIOD: 04/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNIT	RESULT		DRINK WTR STANDARDS	RAW WTR STANDARDS	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000	<			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000	<			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	2.000				
431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000	<			
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000	<			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	7.000		

FACILITY: [illegible] TAYLORVILLE *** CONTINUED ***

431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <		
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <		
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	5.000	
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000	
431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000	
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000	
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <		
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <		
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <		
431WV00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000	
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000 <		
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <		
431WV00	019	81551	XYLENE UG/L	UG/L	1.000 <		

SAMPLE NO: F962633 LOCATION: WELL 4 COLL DATE: 02/15/88 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: DAVE SPRAGLE LAB RCVD: 02/17/88 RECEIVED BY:
SMPL PURP: 9-VARIANCE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: V-VOC OBSERVATNS: SMPL PERIOD: 02/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
		32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
		32104	BROMOFORM UG/L GC/MS		1.000 <			
		32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
		32106	CHLOROFORM UG/L GC/MS		1.000 <			
		34301	CHLOROBENZENE UG/L		1.000 <			
		34423	METHYLENE CHLORIDE UG/L		1.000 <			
		34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
		34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
		34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000 <	7.000		
		34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		1.000 <	200.000		
		34531	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
		34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000 <			
		34716	DICHLOROBENZENE UG/L		1.000 <			
		39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000		
		78113	ETHYLBENZENE UG/L		1.000 <			
		78124	BENZENE UG/L		1.000 <	5.000		
		78131	TOLUENE UG/L		1.000 <			
		81551	XYLENE UG/L		1.000 <			

SAMPLE NO: [illegible] LOCATION: TAYLORVILLE/WELL 4 COLL DATE: 10/27/87 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: J MARUCCO LAB RCVD: 10/28/87 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOC'S LAB COMPL: 11/17/87 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSERVATNS: 2 VOC SMPL PERIOD: 10/87 FUND CODE: PW30

FACILITY: 0210300 TAYLORVILLE *** CONTINUED ***

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431A 00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431A 00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000 <			
431A 00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431A 00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431A 00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431A 00	009	77279	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	5.000		
431A 00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000		
431A 00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000		
431A 00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431A 00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431A 00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431A 00	015	34715	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431A 00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000		
431A 00	017	78131	TOLUENE UG/L	UG/L	1.000 <			
431A 00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <			
431A 00	019	81551	XYLENE UG/L	UG/L	1.000 <			

SAMPLE NO: D75001100 LOCATION: TAYLORVILLE/WELL #4 COLL DATE: 09/08/87 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: JOE MARUCCO LAB RCVD: 09/09/87 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOCS LAB COMPL: 10/05/87 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2VOCS SMPL PERIOD: 09/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431A 00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431A 00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000 <			
431A 00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431A 00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431A 00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431A 00	009	77279	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	5.000		
431A 00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000		
431A 00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000		
431A 00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431A 00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431A 00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431A 00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431A 00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000		
431A 00	017	78131	TOLUENE UG/L	UG/L	1.000 <			
431A 00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <			
431A 00	019	81551	XYLENE UG/L	UG/L	1.000 <			

FACILITY: 0210600 TAYLORVILLE *** CONTINUED ***

SAMPLE NO: 2000A[illegible] LOCATION: WELL COLL DATE: 09/09/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 09/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	002	32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
0000001	004	32104	BROMOFORM UG/L GC/MS		1.000 <			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000 <			
0000001	007	34010	TOLUENE UG/L		1.000 <			
0000001	008	34030	BENZENE UG/L		1.000 <	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <			
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
0000001	014	34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000 <	7.000		
0000001	015	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		2.000	200.000		
0000001	016	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	017	39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000		
0000001	018	00010	WATER TEMPERATURE DEG C		13.500			
0000001	019	00059	FLOW (PUMPING) RATE GAL/MIN		750.000			
0000001	020	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		84.000			
0000001	021	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		470.000			
0000001	022	00400	PH PH UNITS		7.400			
0000001	023	00410	ALKALINITY,TOTAL MG/L AS CACO3		166.000			
0000001	024	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		515.000			
0000001	025	90410			166.000			

FACILITY: 0210600 TAYLORVILLE STATUS: A PUBLIC: Y COMM: Y TYPE WATER: M
TAP: 01 WATER PLANT STATUS: A
RAW SRCE: 520R3 LK TAYLRVLINTAKE 1.64MI SSE WTP 60° S DM STATUS: A

SAMPLE NO: 800187600 LOCATION: TAYLORVILLE LAKE INTAKE COLL DATE: 02/06/90 DELIVERED BY: UPS
SMPL TYPE: RAW COLLECTOR: J MARUCCO LAB RCVD: 02/07/90 RECEIVED BY: PMD
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: 03/16/90 LAB SUPERVISOR: RPF
SMPL PROG: C-CHEMICAL OBSRVATNS: SMPL PERIOD: 02/90 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
10CT000	001	00403	PH LABORATORY UNITS	UNITS	7.800			
101T000	001	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	UM/CM	570.000			
102T000	001	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	MG/L	335.000			
10BT000	001	00410	ALKALINITY,TOTAL MG/L AS CACO3	MG/L	166.000			

FACILITY: 0210400 TAYLORVILLE *** CONTINUED ***

105T000	001	00900	HARDNESS,EDTA MG/L AS CACO3		MG/L	257.000		
107T000	001	00951	FLUORIDE,TOTAL MG/L AS F		MG/L	0.200	4.000	
108T000	001	00940	CHLORIDE,TOTAL MG/L AS CL		MG/L	20.000		
109T000	001	00945	SULFATE,TOTAL MG/L AS SO4		MG/L	70.000		
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N		MG/L	3.200	10.000	
111T000	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		MG/L	0.100	<	
114T000	001	00956	SILICA,TOTAL MG/L AS SIO2		MG/L	12.000		
116T000	001	00720	CYANIDE,TOTAL MG/L AS CN		MG/L	0.005	< 0.200	
144T000	001	01002	ARSENIC,TOTAL RECOVERABLE UG/L AS AS		UG/L	1.000	< 50.000	
151T100	001	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		UG/L	5.000	< 50.000	
153T000	001	71900	MERCURY,TOTAL UG/L AS HG		UG/L	0.050	< 2.000	
155T000	001	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		UG/L	2.000	10.000	
177T100	001	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		MG/L	61.000		
177T100	002	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		MG/L	23.000		
177T100	003	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		MG/L	12.000		
177T100	004	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		MG/L	2.400		
177T100	005	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP		UG/L	50.000	<	
177T100	006	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		UG/L	50.000	1000.000	
177T100	007	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		UG/L	50.000	<	
177T100	008	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		UG/L	0.500	<	
177T100	009	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP		UG/L	3.000	< 10.000	
177T100	010	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICP		UG/L	5.000	< 50.000	
177T100	011	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		UG/L	5.000	< 5000.000	
177T100	012	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		UG/L	5.000	<	
177T100	013	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		UG/L	50.000	< 1000.000	
177T100	014	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		UG/L	51.000	150.000	
177T100	015	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		UG/L	5.000	<	
177T100	016	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		UG/L	3.000	< 50.000	
177T100	017	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		UG/L	118.000		
177T100	018	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		UG/L	5.000	<	
177T100	019	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		UG/L	50.000	< 5000.000	
177T100	020	82394	HARDNESS, CALC - MG/L		MG/L	245.000		

SAMPLE NO: L90108000 LOCATION: TAYLORVILLE COLL DATE: 02/07/89 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: JOE MARICCO LAB RCVD: 02/08/89 RECEIVED BY: PMD
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: 04/03/89 LAB SUPERVISOR: RPF
SMPL PROG: C-CHEMICAL OBSERVATNS: SMPL PERIOD: 02/89 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
100T000	001	00403	PH LABORATORY UNITS	UNITS	7.800			
101T000	001	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	UM/CM	510.000			
102T000	001	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	MG/L	329.000			
103T000	001	00410	ALKALINITY,TOTAL MG/L AS CACO3	MG/L	151.000			
105T000	001	00900	HARDNESS,EDTA MG/L AS CACO3	MG/L	218.000			
107T000	001	00951	FLUORIDE,TOTAL MG/L AS F	MG/L	0.200	4.000		
108T000	001	00940	CHLORIDE,TOTAL MG/L AS CL	MG/L	24.000			
109T000	001	00946	SULFATE,TOTAL MG/L AS SO4	MG/L	70.000			
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N	MG/L	3.200	10.000		

FACILITY: [illegible] TAYLORVILLE *** CONTINUED ***

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		DRINK WTR STANDARDS	RAW WTR STANDARDS	TRIGGER LEVEL
111T000	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N	MG/L	0.100	<			
114T000	001	00956	SILICA,TOTAL MG/L AS SIO2	MG/L	9.000				
116T000	001	00720	CYANIDE,TOTAL MG/L AS CN	MG/L	0.005	<	0.200		
144T000	001	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	UG/L	1.000	<	50.000		
151T100	001	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	UG/L	5.000	<	50.000		
153T000	001	71900	MERCURY,TOTAL UG/L AS HG	UG/L	0.050	<	2.000		
155T000	001	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	UG/L	1.000		10.000		
177T100	001	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	55.000				
177T100	002	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	22.000				
177T100	003	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	MG/L	18.000				
177T100	004	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	MG/L	2.100				
177T100	005	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	UG/L	95.000				
177T100	006	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	UG/L	45.000		1000.000		
177T100	007	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	UG/L	242.000				
177T100	008	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	UG/L	0.500	<			
177T100	009	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	UG/L	3.000	<	10.000		
177T100	010	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	UG/L	5.000	<	50.000		
177T100	011	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	UG/L	5.000	<	5000.000		
177T100	012	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	UG/L	5.000	<			
177T100	013	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	UG/L	50.000	<	1000.000		
177T100	014	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	UG/L	31.000		150.000		
177T100	015	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	UG/L	5.000	<			
177T100	016	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	UG/L	3.000	<	50.000		
177T100	017	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	UG/L	114.000				
177T100	018	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	UG/L	5.000	<			
177T100	019	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	UG/L	50.000	<	5000.000		
177T100	020	00334	HARDNESS, CALC - MG/L	MG/L	228.000				

SAMPLE NO: PB0107720 LOCATION: TAYLORVILLE RAW SURFACE #52089
SMPL TYPE: RAW COLLECTOR: BRUCE MCKINNEY
SMPL PURP: 1-ROUTINE COMMENTS:
SMPL PROG: C-CHEMICAL OBSRVATNS:

COLL DATE: 01/21/88 DELIVERED BY: MAIL
LAB RCVD: 01/22/88 RECEIVED BY: MAD
LAB COMPL: 04/26/88 LAB SUPERVISOR: RPF
SMPL PERIOD: 02/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		DRINK WTR STANDARDS	RAW WTR STANDARDS	TRIGGER LEVEL
100T000	001	00403	PH LABORATORY UNITS	UNITS	7.700				
101T000	001	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	UM/CM	390.000				
102T000	001	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	MG/L	255.000				
103T000	001	00410	ALKALINITY,TOTAL MG/L AS CACO3	MG/L	84.000				
105T000	001	00900	HARDNESS,EDTA MG/L AS CACO3	MG/L	139.000				
107T000	001	00951	FLUORIDE,TOTAL MG/L AS F	MG/L	0.230		4.000		
108T000	001	00940	CHLORIDE,TOTAL MG/L AS CL	MG/L	25.700				
109T000	001	00945	SULFATE,TOTAL MG/L AS SO4	MG/L	46.000				
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N	MG/L	5.100		10.000		
111T000	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N	MG/L	0.130				
114T000	001	00956	SILICA,TOTAL MG/L AS SIO2	MG/L	8.900				
116T000	001	00720	CYANIDE,TOTAL MG/L AS CN	MG/L	0.005	<	0.200		
144T000	001	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	UG/L	1.000		50.000		
151T100	001	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	UG/L	9.000		50.000		

FACILITY: 1210400 TAYLORVILLE *** CONTINUED ***

183T000	001	71900	MERCURY,TOTAL UG/L AS HG	UG/L	0.050 <	2.000	
155T000	001	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	UG/L	1.000 <	10.000	
177T100	001	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	37.000		
177T100	002	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	15.000		
177T100	003	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	MG/L	12.000		
177T100	004	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	MG/L	2.300		
177T100	005	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	UG/L	912.000		
177T100	006	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	UG/L	85.000	1000.000	
177T100	007	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	UG/L	203.000		
177T100	008	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	UG/L	0.500 <		
177T100	009	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	UG/L	3.000 <	10.000	
177T100	010	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	UG/L	5.000 <	50.000	
177T100	011	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	UG/L	5.000 <	5000.000	
177T100	012	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	UG/L	5.000 <		
177T100	013	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	UG/L	897.000	1000.000	
177T100	014	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS,MN ANAL BY ICP	UG/L	66.000	150.000	
177T100	015	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	UG/L	5.000 <		
177T100	016	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	UG/L	3.000 <	50.000	
177T100	017	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	UG/L	122.000		
177T100	018	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	UG/L	5.000 <		
177T100	019	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	UG/L	50.000 <	5000.000	
177T100	020	82344	HARDNESS, CALC - MG/L	MG/L	153.000		

SAMPLE NO: 3033632 LOCATION: LAKE TAYLORVILLE COLL DATE: 03/20/85 DELIVERED BY:
SMPL TYPE: RA4 COLLECTOR: BRUCE MCKINNEY LAB RCVD: 05/15/85 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: C-CHEMICAL OBSRVATNS: SMPL PERIOD: 03/85 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LABCUMHOS/CM @ 25 C		520.000			
		00403	PH LABORATORY UNITS		8.000			
		00410	ALKALINITY,TOTAL MG/L AS CACO3		158.000			
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
		00630	NITRATE & NITRITE TOTAL MG/L AS N		5.800	10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005 <	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		225.000			
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		60.000			
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		21.700			
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		12.000			
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		1.800			
		00940	CHLORIDE,TOTAL MG/L AS CL		14.000			
		00945	SULFATE,TOTAL MG/L AS SO4		64.000			
		00951	FLUORIDE,TOTAL MG/L AS F		0.140	4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		15.000			
		01002	ARSENIC,TOTAL RECOVERABLE UG/L AS AS		1.000	50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		46.000	1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500 <			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		60.000			

FACILITY: 0210400 TAYLORVILLE *** CONTINUED ***

01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP	3.000	<	10.000
01034	CHROMIUM,TOTAL RECOVERABLE UG/L AS CR ANAL BY ICP	5.000	<	50.000
01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	5.000	<	
01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	3.000	<	5000.000
01045	IRON,TOTAL RECOVERABLE, UG/L AS FE ANAL BY ICP	790.000		1000.000
01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	5.000	<	50.000
01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	50.000		150.000
01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	10.000	<	
01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	5.000	<	50.000
01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	97.000		
01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	4.000	<	
01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	19.000		5000.000
01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	770.000		
01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	2.000		10.000
70300	RESIDUE,TOTAL FILTERABLE DRY C,MG/L	352.000		
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	310.000		
71900	MERCURY,TOTAL UG/L AS HG	0.010	<	2.000

APPENDIX F

Illinois
Environmental
Protection Agency

Office of Chemical Safety
2200 Churchill Road, P.O. Box 19276
Springfield, Illinois 62794-9276

IEPA/ENV/89-001 December, 1988

1,1,1-TRICHLOROETHANE
CHEMICAL INFORMATION SHEET*

WHAT IS 1,1,1-TRICHLOROETHANE?

1,1,1-Trichloroethane (1,1,1-TCA, Chlorothene , methylchloroform) is a colorless, non-flammable, chlorinated hydrocarbon. It is a liquid at standard temperature and pressure but in an open environment it quickly volatilizes to a vapor with a sweet chloroform-like odor. The principal industrial uses of 1,1,1-TCA include metal degreasing/cleaning, vapor degreasing, and as an additive to metal cutting oils. 1,1,1-TCA can also be found in household and office products such as liquid drain cleaners, spot removers, typewriter correction fluid, insecticides, liquid shoe polishes, and some aerosol sprays as a propellant.

1,1,1-TCA is a synthetic material with no natural sources. Since its commercial introduction in 1954, the annual U.S. production has grown steadily to an estimated 694 million pounds in 1987. The need for a solvent safer than carbon tetrachloride but with similar properties led to the popularity of 1,1,1-TCA.

HOW DOES 1,1,1-TCA GET INTO THE ENVIRONMENT?

It is estimated that 85-95% of the 1,1,1-TCA used in the U.S. is lost directly to the environment, almost entirely through evaporation to the atmosphere during its production, storage, or use. Three-quarters of these emissions are attributed to use during industrial metal-cleaning operations, which consume approximately two-thirds of the total production. Traces of 1,1,1-TCA can be found nearly everywhere on earth, from the home and workplace to the air, surface waters, and groundwater of industrial areas, to areas as remote as the South Pole.

When released to the air by evaporation, 1,1,1-TCA can be transported long distances with fractions returning to the earth in rain and snow. Most of the atmospheric 1,1,1-TCA remains close to the earth where it is broken down slowly by chemical reaction. About 15%, however, migrates to the stratosphere where breakdown by the sun is rapid.

When 1,1,1-TCA is released to bodies of water, the primary loss is by evaporation which is quickened by agitation and high wind velocity. When released to surface soil, it evaporates to the atmosphere or passes rapidly through the soil and into groundwater. Little or no breakdown of 1,1,1-TCA takes place in the soil. During its most common use, 1,1,1-TCA becomes heavily contaminated with grease and oil. In the past, this waste was disposed of in landfills, dumped on the ground, or dumped into sewers. These activities sometimes led to groundwater contamination where breakdown is slow. Drinking water wells can become affected and very high levels have been recorded in some isolated cases.

The major sources of human exposure to 1,1,1-TCA are from drinking water and to a lesser extent, air. The ambient air of various industrial users of 1,1,1-TCA was analyzed and found to contain the chemical at concentrations ranging from 1.5 to 350 ppm (parts per million). Air concentrations of residences in areas near industrial sources were much lower; averaging .0012 ppm.

Unlike most chlorinated compounds, 1,1,1-TCA does not accumulate in the bodies of animals or in plants. Although 1,1,1-TCA has been detected in some foods and animals, the diet is expected to be a minor source of exposure.

WHAT ARE THE HEALTH EFFECTS ASSOCIATED WITH 1,1,1-TCA EXPOSURE?

1,1,1-TCA is easily absorbed through the lungs and the digestive tract. When inhaled, 1,1,1-TCA is at first rapidly transferred to the blood. As the blood content increases, the rate of absorption slows. Once in the blood, 1,1,1-TCA is preferentially distributed to the central nervous system. The body can metabolize 1,1,1-TCA, but this process is very slow. The primary route of excretion is by exhalation, unchanged, through the lungs. This excretion process was investigated in human volunteers. It was determined that 90% of the absorbed 1,1,1-TCA was eliminated by exhalation within 8 days

Short-term exposure: Extremely high concentrations of 1,1,1-TCA are required to produce effects from short-term exposures. Fatalities have occurred when individuals were exposed to very high vapor concentrations of about 5000 ppm (0.5%) or more in unventilated tanks or other confinements. By mouth, it is estimated that 1/2 to 1 pint would be fatal to an adult man. Death is usually due to respiratory arrest or shock. Breathing high concentrations (over 350 ppm) can cause eye, nose, and throat irritation and temporary narcotic-like effects sometimes followed by mild liver and kidney effects, also temporary. Extended contact with skin can result in temporary redness and irritation.

Long-term exposure: Studies of 21 women occupationally exposed for 6 1/2 years at levels of 110 to 345 ppm and 196 men occupationally exposed for at least 5 years at levels of 4 to 53 ppm 1,1,1-TCA showed no adverse effects. There is no evidence that 1,1,1-TCA causes cancer, reproductive problems, or birth defects in humans. Studies on rats and mice concluded that there was no harm to the fetus when mothers were exposed to 1,1,1-TCA vapors at levels up to 875 ppm. Vapor levels of around 2000 ppm caused some non-fatal delays in the fetal development of rats. Other studies on rats, mice, and dogs revealed minor effects on the liver. Inhalation and oral studies on rodents reported no evidence that 1,1,1-TCA causes cancer.

HOW IS 1,1,1-TCA REGULATED?

1,1,1-TCA is listed as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) and, as such, its disposal is regulated. Threshold limit values (TLVs) adopted by the American Conference of Governmental Industrial Hygienists refer to airborne concentrations of substances and represent conditions under which it is believed that nearly all healthy workers may be repeatedly exposed without adverse effect. The TLV for 1,1,1-TCA is 350 ppm as an average 8-hour exposure for a 5-day workweek. Maximum Contaminant Levels (MCLs) are enforceable health-based standards for drinking water under the Safe Drinking Water Act. The MCL for 1,1,1-TCA is 0.2 mg/l (ppm). USEPA, under the Clean Water Act, has developed nonenforceable Ambient Water Quality Criteria for the protection of human health. For 1,1,1-TCA, the values are 18.4 mg/l (ppm) for waters used for drinking and fishing and 1030 mg/l (ppm) for waters used for fishing only. The Illinois General Use Water Quality Standards provide for protection of aquatic organisms by specifying that toxic substances not be present in surface waters at levels greater than 1/10th the lethal dose to common aquatic species. The safe level for fathead minnows, for instance, is 5.28 mg/l (ppm).

CM:rmi/0356k/sp, 1-2

Note: This information sheet is a summary of readily available data regarding the general nature and effects of this chemical. The reader is encouraged to consult other sources or an appropriate professional if a more detailed explanation for specific concerns is desired.

APPENDIX G

Illinois
Environmental
Protection Agency

Office of Chemical Safety
2200 Churchill Road, P.O. Box 19276
Springfield, Illinois 62794-9276

IEPA/ENV/87-001-6

April, 1987

- GLOSSARY -
CHEMICAL INFORMATION SHEET

absorption - the movement of a chemical into the bloodstream or other body fluid or tissue after its entrance into the body through the skin, lungs, or gastrointestinal tract.

acute - sharp, severe; having a relatively rapid onset, often with severe symptoms and a relatively short course. In toxicology refers to a single large exposure to a chemical (acute exposure), or to the development of symptoms of poisoning soon after a single exposure to a substance (acute toxicity).

ACGIH - the American Conference of Governmental Industrial Hygienists. It recommends upper limits (see TLV) for exposure to workplace chemicals.

bioconcentration - the process in and by which chemical substances are accumulated in living organisms above their concentration in the environment. For example, a chemical is spilled into a river or lake and is ingested and stored by small organisms like plankton; small fish eat the plankton; and large fish eat the smaller fish. As this process occurs, the chemical becomes thousands of times more concentrated in the tissues of the large fish than in the plankton or the water. Usually occurs with fat-soluble compounds rather than water-soluble compounds.

biodegradation - the breaking down of an organic substance, resulting from the complex action of living organisms.

cancer - a group of diseases characterized by malignant, uncontrolled growth of cells of body tissue (tumors).

carcinogen - a term applied generally to any substance that is capable of producing cancer or increasing the growth and spreading of tumors in an organism.

chronic - occurring over a period of time. In toxicology refers to repeated exposure (chronic exposure) to a chemical for a relatively long period of time or persistence of symptoms or disease over a long period of time (chronic toxicity).

epidemiology - the study of the incidence, distribution, and control of disease in human populations.

leaching - downward movement of a material in solution through soil.

Maximum Contaminant Level (MCL) - the maximum permissible level of a contaminant that is allowed in a public water supply system.

metabolism - the changes that a chemical undergoes in an organism. The products of metabolism may be more or less active in the organism than the original (parent) compound. In animals, many of these products find their way to body excretions, for example through lung exhalation, urine, or feces. Tracing the pathways of metabolism is important to shed light on possible relationships between chemicals and particular health effects.

mg/m^3 - means milligrams of a chemical in a cubic meter of air. It is a density measurement expressing the amount of air pollutant in a given volume of air.

mutagen - a substance that causes a change in the genetic material in a body cell, called a mutation. Mutations may lead to birth defects, miscarriages, or cancer, or they may have no obvious effect, depending on what genetic material is damaged and on where the damage occurs.

persistent - existing for a long time in the environment or the body. For chemicals, this means not easily broken down; for the effects of chemicals, this means the effect remains or recurs long after exposure to the chemical.

pesticide - a general term used to describe a product designed to kill or control unwanted organisms; for example, herbicides are designed to control unwanted plants, insecticides are designed to control unwanted insects, fungicides are designed to control fungus and mold, etc.

ppb - an expression describing a small concentration, equal to an amount of one substance in a billion parts of another material; for example, one drop of alcohol in 16,000 gallons of water.

ppm - an expression describing a small concentration, equal to an amount of one substance in a million parts of another material; for example, one drop of alcohol in 16 gallons of water.

solvent - a liquid substance capable of dissolving or dispersing one or more other substances.

teratogen - a substance that causes stillbirths, birth defects, or malformations by affecting the growing fetus.

TLV - is the Threshold Limit Value for air. The TLV is a workplace exposure limit recommended by ACGIH and represents conditions under which it is believed that nearly all workers may be repeatedly exposed to a substance day after day without adverse effect.

toxicology - the study of the adverse effects of chemicals on living organisms.

volatile - readily vaporizable at a relatively low temperature.

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